

In all cases the eggs were laid singly and partly hidden in the soil.

The larvæ were found in different parts of the body of the worm and do not appear to be confined to any particular point.

Trapping Pollenia rudis.

On June 6, a fly trap baited with bananas was placed in the open field and on June 27 a second trap was put in operation. Beginning June 26 collections were made early each morning, when the flies were stupefied with chloroform and removed from the traps. It was found that more flies were caught when the trap was raised about 8 inches from the ground.

The first *Pollenia* were removed from the trap on June 10 at the second collection.

In July 277 *Pollenia* were caught in both traps or 117 ♂ and 160 ♀. The highest catch, 39, was on July 5th.

In August 314 *Pollenia* were caught; 190 ♂ and 124 ♀. Largest catch 137, August 26-27, Saturday and Sunday collection.

In September 368 *Pollenia* were caught; 151 ♂ and 217 ♀. Largest catch, 77, September 9-10, Saturday and Sunday collection.

In October 938 *Pollenia* were caught; 473 ♂ and 465 ♀. Largest catch, 120, September 10.

In November 1026 *Pollenia* were caught; 494 ♂ and 532 ♀. Largest catch, 280, November 11-12, Saturday and Sunday collection.

TOTALS OF *POLLENIA* CAUGHT BY MONTHS

Month	♂	♀	♂ and ♀
July	117	160	277
August	190	124	314
September	151	217	368
October	473	465	938
November	494	532	1026
Season	1425	1498	2923

A New Species of *Anomala* (Coleop. Scarabaeidae.)*

By WM. P. HAYES, and J. W. MCCOLLOCH, Kansas Agricultural Experiment Station.

During the course of the studies of white grubs in Kansas by the writers, an apparently new species of *Anomala* has been found which is of considerable economic importance. A

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description is presented at this time in order that reference can be made to the species in a forthcoming publication on its life history.

Anomala kansana new species.

♂. Color dorsally dark brown to piceous with lateral margins of elytra flavo-testaceous; ventrally fusco-testaceous to rufo-testaceous with faint, greenish metallic lustre; legs rufo-testaceous proximally, piceous distally; antennæ fusco-testaceous. *Size* 11-12.5 mm. long, 5-6.75 mm. wide.

Head piceous with faint purple to æneous iridescence. Labrum concealed dorsally by clypeus. Clypeus strongly reflexed apically, angles broadly rounded, about twice as wide as long, closely and confluent punctured, producing a dense rugosity on disk, less coarsely punctured on caudal margin. Clypeo-frontal suture slightly curved, with tentorial depressions laterally. Front slightly flattened, coarsely and confluent punctured, vertex more sparsely punctured, punctures not confluent, front and vertex with purple to æneous iridescence.

Prothorax unicolorous, piceous to rufo-piceous. *Size* 5.75 mm. wide, 3.25 mm. long. Surface evenly punctured on disk, punctures larger than those of vertex but sparser, becoming more confluent laterally. Faint median, depressed line anteriorly, in some specimens extending caudad at least half the length of prothorax, in others almost obliterated; near each lateral margin a rather strongly depressed, rounded area; sides evenly and strongly arcuate, converging in apical half of margin; angles rather strongly rounded, posterior pair more rounded than anterior angles. Basal bead entire.

Scutellum semicircular, punctures irregular, about equal in size to those of prothoracic disk, posterior margin impunctate, forming a smooth margin. *Elytra*, in type, piceous with posterior two-thirds to three-fourths of lateral and caudal margins flavo-testaceous, extending slightly anteriorly on suture, varying as noted below, lateral margins subparallel, becoming more rounded apically, punctures on disk strongly rugose. Striæ moderately coarse, deeply impressed and almost confluent punctured, first interval finely and sparsely punctate; second interval wide and confusedly, rugosely punctate, narrowing toward the apex; in some specimens the punctures form a median sulcus apically; third interval narrow and faintly punctate; fourth interval almost as wide as second and confusedly punctate.

Pygidium, shining, rufo-testaceous, finely and densely punctate, punctures shallow and somewhat arcuate.

Tarsi of posterior legs longer than tibia by length of tarsal claws, femur and tibia about equal. Upper claw of first and second pair cleft, rami equal in length with one ramus slightly stouter in male. In female one ramus slightly shorter and stouter than other ramus.

♀. Differs from male in having the club of antenna shorter than the stem, in the male longer than the stem. The eyes of the female are less prominent and separated by about twice their width, while in the male, eyes are convex and separated by less than twice their width.

Variations. The normal piceous color of the elytra is replaced by spots, splashes or streaks of testaceous coloring.

Systematic position. This species belongs in the *flavipennis* section as defined by Casey (1914)¹ and is closely related to *flavipennis* Burm., but is readily distinguished by its larger size, its darker thoracic coloration and the characteristic markings of the elytra.

Material. Described from 125 specimens. *Type* in the collection of the Kansas State Agricultural College. Paratypes will be deposited in United States National Museum. Described from specimens collected and reared during June and July. Locality, Riley and Clay Counties, Kansas.

A New Lycaenid (Lep.) from the Pacific Coast.

By CHAS. L. FOX, San Francisco, California.

Plebeius shasta comstocki new variety.

Separable from *shasta* and *minnehaha* by the much broader border on the outer margin of the upper side of the primaries in the male, brighter shade of color of the upper side of the female, different ground color and absence of white markings on the under side of both male and female.

♂.—Expanse 23 mm. *Upper side.* Primaries: color purplish blue; broad fuscous border on outer margin with slight ferruginous tinge twice as broad as in *shasta* averaging 2.5 mm. in width; fringes white, inside a narrow black line; black, reniform, discal spot. Secondaries: same color as primaries; fuscous border on outer margin half the width of that on primaries.

¹Casey, T. L. A Revision of the American species of Rutelinae, Dynastinae and Cetoniinae. Mem. Coleop. VI. 1915. pp. 1-394.